AUDIT REPORT FOR NEW ZEALAND MARCH 6 THROUGH MARCH 24, 2000

INTRODUCTION

Background

This report reflects information that was obtained during an audit of New Zealand's meat inspection system from March 6 through March 24, 2000. Nine of the seventy-two establishments certified to export meat to the United States were audited. Five of these were slaughter establishments; three were conducting processing operations and one was cold storage.

The last audit of the New Zealand meat inspection system was conducted by a team of subject matter experts in March 1999. Nine establishments were audited and they were acceptable. The team reported several equivalence issues regarding HACCP and SSOP implementation, microbiological testing and inspection system control. The report was forwarded to New Zealand authorities and issues were discussed in a telephone-conference with New Zealand officials and International Policy Division, Washington prior to this visit.

During calendar year 1999, New Zealand exported 460, 325, 350 pounds of fresh beef and beef products, beef edible organs, veal, mutton and lamb products to the U.S. Port-of-entry rejections were 1, 930, 720 pounds (.4194%) for processing defects, miscellaneous defects, contamination, pathological defects, and transportation damage and missing shipping marks.

PROTOCOL

This on-site audit was conducted in four parts. One part involved visits with New Zealand's national meat inspection officials to discuss oversight programs and practices, including enforcement and compliance activities. The second entailed an audit of a selection of records in the meat inspection headquarters facilities preceding the on-site visits. The establishments were selected randomly for records audits and on-site audits on the basis of several factors which included port of rejection rates, volume of export to the United States, and previous audit history. The third was conducted by on-site visits to establishments. The fourth was a visit to three laboratories, one performing analytical testing of field samples for the national residue testing program, and the others culturing field samples for the presence of microbiological contamination with *Salmonella and E. coli*. New Zealand uses private and establishment laboratories for microbiological testing.

Program effectiveness determinations focused on five areas of risk: (1) sanitation controls, including the implementation and operation of Sanitation Standard Operating Procedures (SSOPs), (2) animal disease controls, (3) residue controls, (4) slaughter/ processing controls, including the implementation and operation of Hazard Analysis and Critical Control Point (HACCP) systems and the *E. coli* testing program; and (5) enforcement controls, including the testing program for *Salmonella* species. New Zealand's inspection system was assessed by evaluating these five risk areas.

During all on-site establishment visits, the auditor evaluated the nature, extent, and degree to which findings impacted on food safety and public health, as well as overall program delivery. The auditor also determined if establishment and inspection system controls were in place. Establishments that do not have effective controls in place to prevent, detect and eliminate product contamination/adulteration are considered unacceptable and therefore ineligible to export products to the U.S., and are delisted accordingly by the country's meat inspection officials.

RESULTS AND DISCUSSION

Summary

Based on the performance of the individual establishments, New Zealand's "In-Plant Inspection System Performance" was evaluated as <u>In-Plant System Controls In Place</u>.

Effective inspection system controls were found to be in place in all nine establishments audited. Details of audit findings and observations, including compliance with HACCP, SSOPs, and testing programs for *Salmonella* and generic *E. coli* are discussed later in this report.

Entrance Meeting

On March 7, 2000, an entrance meeting was held at U.S. Embassy of New Zealand at Wellington, and was attended by Mr. David B. Young, Agriculture Attaché; Ms. Vinita Sharma, Agriculture Assistant of Foreign Agriculture Service; Mr. Donald Smart, Director, Review Staff; and Dr. Suresh Singh, International Audit Staff Officer of the Technical Service Center. Topics of discussion included the following:

- 1. Travel arrangements and itinerary within New Zealand.
- 2. Briefing of status of recent correspondence between FSIS and Ministry of Agriculture and Forestry (MAF).

On March 8, an entrance meeting was held at the Wellington offices of the Food Assurance Authority (FAA) of the Ministry of Agriculture and Forestry (MAF), New Zealand, and was attended by Dr. Tony Zohrab, Director Animal Products; Dr. Geoff Allen, Director Compliance and Investigation Group; Dr. Roger Cook, National Manager-Microbiology; Dr. John Lee, Market Access Counselor, North America; Ms. Judy Barker, Program Manager; Dr. Suresh Singh, International Audit Staff Officer and Mr. Donald Smart, Director Review Staff of the Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA). Topics of discussion included the following:

- 1. Welcome by FAA-NZ and Structure of the New Zealand Meat Inspection Program.
- 2. National Microbiological DataBase of New Zealand (NZ).
- 3. Previous Audit Reports and Washington Correspondence.

Headquarters Audit

There had been no changes in the organizational structure or upper levels of inspection staffing since the last U.S. audit of the New Zealand inspection system in March 1999. To gain an accurate overview of the effectiveness of inspection controls, FSIS requested that the audits of the individual establishments be led by the compliance inspection officials who normally conduct the periodic reviews and audits for compliance with U.S. specifications. The FSIS auditor (hereinafter called "the auditor") observed and evaluated the process.

The auditor conducted a review of inspection system documents pertaining to the establishments listed for records review. This records review was conducted at the headquarters on March 8 and 9. The records review focused primarily on food safety hazards and included the following:

- Internal review reports and compliance check/list
- Compliance visits to establishments that were certified to export to the U. S.
- Training records for inspectors
- Records such as generic labels, and animal raising claims.
- New laws and implementation documents such as regulations, notices, directives and guidelines.
- Sampling and laboratory analyses for residues.
- Pathogen reduction and other food safety initiatives such as SSOPs, HACCP programs, generic *E. coli* testing and *Salmonella* testing.
- Sanitation, slaughter and processing inspection procedures and standards.
- Control of products from livestock with conditions such as tuberculosis, cysticercosis, etc., and of inedible and condemned materials and veterinary coverage
- Export product inspection and control including export certificates.
- Enforcement records including examples of criminal prosecution, consumer complaints, recalls, seizure and control of noncompliant product, and withholding, suspending, withdrawing inspection services from or delisting an establishment that is certified to export product to the United States.

No concerns arose as a result of the examination of these documents.

Government Oversight

All inspection veterinarians and inspectors in establishments certified by New Zealand as eligible to export meat products to the United States were full-time, MAF Verification Agency and Asure NZ employees, receiving no remuneration from either industry or establishment. Asure inspectors are occasionally contracted out to the establishment to perform quality assurance functions. This use of Asure employees by establishments continues to be an equivalence issue. MAF Food Assurance Authority (MAFFAA) and MAF Verification Agency (MAFVA) are both within the Ministry of Agriculture and Forestry. Asure New Zealand (ANZ) is a State Owned Enterprise (SOE) that is accountable to the Minister of State Owned Enterprises. Most of the field Veterinary inspection officials are employed by MAFVA; most of the central government officials are employed by MAFFAA; and inspectors in the establishments are employed by Asure NZ. All three agencies work under guidelines of Memorandum of Understanding.

Establishment Audits

Seventy-two establishments were certified to export meat products to the United States at the time this audit was conducted. Nine establishments were visited for on-site audits. In all establishments visited, both New Zealand inspection system controls and establishment system controls were in place to prevent, detect and control contamination and adulteration of products.

Laboratory Audits

During the laboratory audits, emphasis was placed on the application of procedures and standards that were equivalent to U.S. requirements. Information about the following risk areas was also collected:

- 1. Government oversight of accredited, approved, and private laboratories .
- 2. Intra-laboratory quality assurance procedures, including sample handling.
- 3. Methodology.

The AgriQuality New Zealand Limited Residues Laboratory in Upper Hutt, NZ was audited on March 22, 2000. Effective controls were in place for sample handling and frequency, timely analysis, data reporting, tissue matrices for analysis, equipment operation, print outs, minimum detection levels, recovery frequency, percent recoveries, and corrective actions. The methods used for the analyses were acceptable.

New Zealand's microbiological testing for *Salmonella and E. coli* was being performed in private and contract-approved laboratories. Two of these, the Biotest Laboratory and Canterbury Meat Packers Ltd. Laboratory in Hamilton and Ashburton were audited. The auditor determined that the system met the criteria established for the use of private laboratories under FSIS's Pathogen Reduction/HACCP rule. These criteria are:

- 1. The laboratories were accredited by third party MILAB accrediting organization with oversight by the government.
- 2. The laboratories had properly trained personnel, suitable facilities and equipment, a written quality assurance program, and reporting and record-keeping capabilities.
- 3. Results of analyses were being reported to the government and establishment.

Establishment Operations by Establishment Number

The following operations were being conducted in the nine establishments:

Beef and lamb slaughter, cutting, boning and grinding - two establishments (ME 78, and ME 52)

Beef and lamb boning and canning – one establishment (PH 134)

Beef and Lamb cutting, boning and grinding – one establishment (PH 173)

Beef slaughter, cutting and boning – three establishments (ME 23, ME 70 and ME 199)

Beef, Lamb, Goat and Veal slaughtering – one establishment (ME 130)

Cold Storage-all species – one establishment (S237 previously ME 122)

SANITATION CONTROLS

Based on the on-site audits of establishments, New Zealand's inspection system had controls in place for water potability, hand washing facilities, sanitizers, pest control program, temperature control, lighting, and ventilation. Basic establishment facilities, condition of facilities and equipment, product protection and handling and establishment sanitation programs were acceptable.

Sanitation Standard Operating Procedures (SSOPs)

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment A).

The SSOPs were found to meet the basic FSIS regulatory requirements. In establishments ME52 and ME130, establishment quality assurance takes care of pre-operational sanitation checks and SSOP is part of the establishment's HACCP.

Cross-Contamination

- 1. Fecal contamination was observed on a few beef carcasses in establishment ME23, carcasses were railed out immediately and MAF Verification veterinary officials took corrective actions.
- 2. A belt on the conveyor in the boning room of establishment ME 78 was broken/cracked in several places and torn on the edges (unhygienic-hard to clean). MAF Verification and establishment officials discussed and agreed to replace the belt.
- 3. Peeling paint and rust spots were observed in the carcass cooler in establishment ME 52. MAF Verification, establishment officials and the Compliance auditor discussed this issue and corrective action will be taken.

Product Handling and Storage

Meat products were found to be stored in good condition but facilities (floor, doors and lockers) in establishment S237 were in need of repair. This was an old slaughter establishment that had been converted to cold storage. Establishment officials agreed to repair and modify the facilities and agreed on a time schedule with MAF Verification and Compliance authorities.

Personnel Hygiene and Practices

In all establishments, employees were observed to follow good personnel hygiene practices.

ANIMAL DISEASE CONTROLS

New Zealand's inspection system had controls in place to ensure adequate animal identification, ante-mortem and post-mortem inspection procedures and dispositions, condemned and restricted product control, and procedures for sanitary handling of returned and rework product.

No classification records are kept for reasons of condemnations of organs (liver heart and lungs) in establishment ME 70.

There were reported to have been no outbreaks of animal diseases with public-health significance since the previous U.S. audit. MAF Biosecurity Authority (MAFBA) publishes a Directory and other booklets, which covers biosecurity and animal health issues. This is of special interest to all those with a stake in New Zealand's animal production industries.

RESIDUE CONTROLS

New Zealand's National Residue Testing Plan for 2000 was being followed, and was on schedule. The New Zealand inspection system had adequate controls in place to ensure compliance with sampling and reporting procedures and storage and use of chemicals. The Animal Products Act of 1999 reforms the New Zealand law that regulates the production and processing of animal materials and products to manage associated risks including drug and chemical residues.

SLAUGHTER/PROCESSING CONTROLS

Except as noted below, the New Zealand's inspection system had controls in place to ensure adequate product protection and processed product controls.

HACCP Implementation

All establishments approved to export meat products to the U.S. are required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program and met FSIS requirements. The data collection instrument used accompanies this report (Attachment B).

Testing for Generic E. coli

New Zealand has adopted the FSIS regulatory requirements for *E. coli* testing. All of the establishments audited were required to meet the basic FSIS regulatory requirements for generic *E. coli* testing, and were audited and evaluated according to the criteria employed in the U.S. domestic inspection program and criteria determined by protocol of study and approved by FSIS for equivalency determination. The data collection instrument used accompanies this report (Attachment C), which indicates that recording of test results in establishments ME23, ME70, ME78, ME130, and ME134 were not done in a table or process control chart or graph.

The *E. coli* testing programs were found to meet the basic FSIS regulatory requirements for generic *E. coli* testing with the exception of the following equivalent measures:

1. TESTING STRATEGY:

- Testing frequency is based on National Microbiological DataBase with at least five carcasses per week at three sites regardless of production volume.
- The predominant class of animals slaughtered in an establishment is sampled.

2. SAMPLING SITES:

- New Zealand samples cattle at three sites: flank, brisket, and outside hind leg. The sample sites include the sites most likely to be contaminated with fecal contamination.
- The sample sites encompass a large enough surface area to ensure that the effectiveness of the slaughter process controls will be evaluated.
- The sample sites provide the same probability of detecting the presence of fecal contamination as the sites chosen by FSIS.

3. SAMPLING TOOLS:

- New Zealand uses a swab-sampling tool. The swab is a traditional or generally recognized sample collection tool for sampling for *E. coli* on meat or poultry surfaces.
- The tool is sensitive enough to gather *E. coli* present on the sample site.
- The tool does not contaminate the surfaces of the carcass.

4. ANALYTICAL METHODS:

- The method is a quantitative method of analysis.
- The method is approved by the AOAC International.

ENFORCEMENT CONTROLS

Inspection System Controls

The New Zealand inspection system controls [ante-and post-mortem inspection procedures and dispositions, control of restricted product and inspection samples, control and disposition of dead, dying, diseased or disabled animals, boneless meat re-inspection, shipment security, including shipment between establishments, prevention of commingling of product intended for export to the United States with domestic product, monitoring and verification of establishment programs and controls (including taking and documentation of corrective actions under HACCP plans), inspection supervision and documentation, the importation of only eligible livestock or poultry from other countries (i.e., only from eligible countries and certified establishments within those countries), and the importation of only eligible meat or poultry products from other counties for further processing] were in place and effective in ensuring that products produced by the establishment were wholesome, unadulterated, and properly labeled.

Adequate controls were found to be in place for security items, shipment security, and products entering the establishments from outside sources.

Testing for Salmonella Species

All of the establishments audited were required to meet the basic FSIS regulatory requirements for *Salmonella* testing, and were evaluated according to the criteria employed in the U.S. domestic inspection program and criteria used in the equivalency determination. The data collection instrument used accompanies this report (Attachment D).

The Salmonella testing programs were found to meet the basic FSIS regulatory requirements.

New Zealand has adopted the FSIS regulatory requirements for *Salmonella* testing with exception of the following equivalent measures :

1. SAMPLE COLLECTOR: Establishment Takes Samples.

- MAF develops a written, national sampling plan and enforces a national *Salmonella* testing program for sample collection and processing that is followed in all New Zealand establishments that export meat products to the United States.
- Sample collection procedures are directly reviewed via specific tasks that are assigned to a trained on- site veterinarian from MAF Verification Agency. The accredited laboratory and the government accreditation authority (MILAB) are also responsible for ensuring correct sampling procedures. MAF Food (Compliance) performs periodic audits of MILAB and MAF Verification, including the oversight and monitoring activities of the sample collector. MAF Food (Animal Products) has mandatory access to all microbiological test results, including Salmonella test results. The on-site MAF Verification Agency Veterinarian also has direct access to all Salmonella test results.
- MAF uses *Salmonella* test results to monitor the performance of each establishment over time.
- The government of New Zealand (MAF) takes immediate action any time an establishment fails to meet a *Salmonella* performance standard.

2. LABORATORIES: Private laboratories analyze samples.

- The laboratories are government, independent non-government, or establishment laboratories that are all accredited by the government accreditation authority, MILAB. MILAB, in turn, is audited bi-annually by MAF Food (Compliance). MAF Food (Animal Products) sets MILAB standards. All laboratories are assessed to ISO 25 standards. MILAB accreditation and responsibilities are audited bi-annually and at the request of MAF Food (Animal Products) by MAF Food (Compliance). The Inter-Laboratory Comparison Program is a government program that conducts monthly proficiency tests with each accredited laboratory and is accredited to ISO 9000 and ISO Guide 43. The accreditation program is mandated, established, and regulated by MAF Food (Animal Products).
- All accredited laboratories have a formal program which ensures that laboratory personnel
 are properly trained, that there are suitable facilities and equipment, that there is a written
 quality assurance program, and that there are adequate reporting and record-keeping
 facilities.

Test results are reported directly to MAF inspection personnel and it was observed that test results were also reported to the establishment.

3. SAMPLING TOOLS.

• The swab tool method of sample collection is used. The swab tool is an internationally recognized sample collection tool for sampling Salmonella on meat or poultry products, is sensitive enough to gather an adequate quantity of the *Salmonella* that are present at the sample sites, and does not contaminate surfaces of the carcasses.

- 4. SAMPLING TECHNIQUES: Time of Collection of Samples.
 - Samples are taken at the end of the slaughter or production process from the same carcass (one side for *E. coli* and one side for *Salmonella*) and prior to the carcass being cut and/or packaged.

Species Verification Testing

At the time of this audit, New Zealand was not exempt from the species verification testing requirements. The auditor verified that species verification testing was being conducted in accordance with FSIS requirements.

Monthly Reviews

The National Compliance and Investigation Group equivalent to our Domestic Review were performing the in-depth reviews and audits. National Assessors domiciled throughout the country report to the Director, Compliance and Investigation of MAFFA. Specially trained senior technical supervisors of MAFVA conduct the monthly review based on the risk performance program called Performance Based Verification (PBV). Most of the team leaders of MAFVA are veterinarians with at least 5-15 years of experience. All the establishments visited were not being reviewed routinely on a monthly basis because of PBV performance.

The internal review program consists of both audits by the CIG and the IQA group within MAFVA. Audits may be announced or unannounced. The records of audited establishments were kept in the inspection offices of the individual establishments, and copies were also kept in the central MAF offices in Wellington, and were routinely maintained on file for a minimum of three years.

Establishments found during the course of the internal review program to be seriously out of compliance with the U.S. requirements may be delisted for U.S. export or be subject to other sanctions. Delistment may be imposed by either MAFVA staff or by the CIG. The party imposing this sanction performs in-depth audits prior to relisting. Before relisting is permitted, all non-compliances must either have been completely resolved and appropriate preventive action taken to prevent recurrence. This may include programmed management plans where longer-term corrective actions are required. Where MAFVA is involved in such sanctions, they are subject to periodic audits by CIG.

After observing the internal reviewers' activities in the field, the auditor was confident in their professionalism, thoroughness, and knowledge of U.S. requirements, and in the effectiveness of New Zealand's internal review program as a whole in the HACCP environment.

Enforcement Activities

Enforcement activities are carried out with a Memorandum of Understanding between all Government agencies involved with all aspects of the meat production and distribution system. MAF-Food Assurance Authority has the sole power to initiate all enforcement actions.

Exit Meeting

An exit meeting was conducted in Wellington on March 23, 2000. The New Zealand participants were Dr. Tony Zohrab, Director, Animal Products; Dr. Geoff Allen, Director Compliance and Investigation; Dr. Roger Cook, National Manager Microbiology; Mr. Neil Kiddey, Manager, Compliance and Investigation; and Ms. Judy Barker, Program Manager HACCP from MAFFA. Other participants were Mr. David Young, Agriculture Attaché, American Embassy; Mr. Donald Smart, Director Review Staff; and Dr. Suresh Singh, International Audit Staff Officer of FSIS.

The following topics were discussed:

- 1. Audit findings and observations of the auditor:
- a. Fecal contamination was observed on a few carcasses in establishment 23, carcasses were railed out immediately and MAF Verification Veterinary officials took corrective actions.
- b. A belt on the conveyor in the boning room of establishment ME 78 was broken/cracked in several places. MAF Verification and establishment officials discussed and agreed to replace the belt.
- c. Peeling paint and rust spots were observed in the carcass cooler in establishment ME 52. MAF Verification, establishment officials and the Compliance auditor discussed this issue and planned to take corrective action.
- d. Facilities: doors, floor and lockers were in need of repair in establishment S 237. Establishment officials agreed to repair and modify the facilities and agreed on time schedule with MAF Verification and Compliance authorities. These are discussed above in this report in the respective risk areas.
- 2. Integration and control of meat inspection system-MOU guidelines between different agencies (MAFFA, MAFVA, and ASURE) involved in meat inspection.
- 3. Monthly Supervision of establishments by MAFVA. A supervisor routinely on a monthly basis was not reviewing all the establishments. MAF authorities explained that supervisory visits are done on the basis of the Performance Based Verification (PBV) inspection system. The internal review program was not applied equally to both export and non-export establishments. MAF authorities explained that New Zealand s meat export market is very large so they put more resources in the export market than domestic market. This is explained in this report in the monthly review section.
- 4. Leasing and contracting of Asure inspectors to the establishments. Asure (meat) inspectors are sometimes leased and contracted out to the establishments to do certain quality control functions in the establishment. This seems a conflict of interest issue. This matter is subject to discussion between MAF Food officials and the International Policy Division (IPD) of FSIS. MAF Food has provided an explanatory letter to IPD and is awaiting further response to this.
- 5. FSIS requirement for certification of cold storage and warehouses/freezers was reemphasized and NZ officials agreed to comply.

CONCLUSION

The inspection system of New Zealand was found to have effective controls to ensure that product destined for export to the United States was produced under conditions equivalent to those which FSIS requires in domestic establishments. Nine establishments were audited and all were acceptable. The deficiencies encountered during the on-site establishment audits were adequately addressed to the auditor's satisfaction.

Dr. Suresh P. Singh International Audit Staff Officer (signed) Dr. Suresh P. Singh

ATTACHMENTS

- A. Data collection instrument for SSOPs
- B. Data collection instrument for HACCP programs
- C. Data collection instrument for E. coli testing.
- D. Data collection instrument for Salmonella testing
- E. Laboratory audit form
- F. Individual Foreign Establishment Audit Forms
- G. Written Foreign Country's Response to the Draft Final Audit Report

Data Collection Instrument for SSOPs

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written SSOP program.
- 2. The procedure addresses pre-operational sanitation.
- 3. The procedure addresses operational sanitation.
- 4. The pre-operational procedures address (at a minimum) the cleaning of food-contact surfaces of facilities, equipment, and utensils.
- 5. The procedure indicates the frequency of the tasks.
- 6. The procedure identifies the individuals responsible for implementing and maintaining the activities.
- 7. The records of these procedures and any corrective action taken are being maintained on a daily basis.
- 8. The procedure is dated and signed by the person with overall on-site authority.

The results of these evaluations were as follows:

	1.Written	2. Pre-op	3. Oper.	4. Contact	5. Fre-	6. Respons-	7. Docu-	8. Dated
	program	sanitation	sanitation	surfaces	quency	ible indiv.	mentation	and signed
Est. #	addressed	addressed	addressed	addressed	addressed	Identified	done daily	
23	V	V	√	√	$\sqrt{}$	V	V	$\sqrt{}$
52	V	V		V	$\sqrt{}$	V	V	V
70	V	V		V	$\sqrt{}$	V	V	V
78	V	V	√	√	$\sqrt{}$	V	V	$\sqrt{}$
119	V	V	√	√	$\sqrt{}$	V	V	$\sqrt{}$
130	V	V	√	√	$\sqrt{}$	V	V	$\sqrt{}$
134	V	V	√	V	$\sqrt{}$	V	V	$\sqrt{}$
173	V	V	√	V	$\sqrt{}$	V	V	$\sqrt{}$
237	V	V	V	V	V	V	V	V

Internal compliance audit documentations records of establishments 18, 23, 39, 54, 84, 87, 100, 104, 118, 122, 128, 366 and 504 were audited and met all the requirements of FSIS.

Data Collection Instrument for HACCP Programs

Each of the establishments approved to export meat products to the U.S. (except Est.237, which was a cold-storage facility) was required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. The establishment has a flow chart that describes the process steps and product flow.
- 2. The establishment had conducted a hazard analysis.
- 3. The analysis includes food safety hazards likely to occur.
- 4. The analysis includes the intended use of or the consumers of the finished product(s).
- 5. There is a written HACCP plan for each product where the hazard analysis revealed one or more food safety hazard(s) reasonably likely to occur.
- 6. All hazards identified in the analysis are included in the HACCP plan; the plan lists a CCP for each food safety hazard identified.
- 7. The HACCP plan specifies critical limits, monitoring procedures, and the monitoring frequency performed for each CCP.
- 5. The plan describes corrective actions taken when a critical limit is exceeded.
- 6. The HACCP plan was validated using multiple monitoring results.
- 7. The HACCP plan lists the establishment's procedures to verify that the plan is being effectively implemented and functioning and the frequency for these procedures.
- 11. The HACCP plan's record-keeping system documents the monitoring of CCPs and/or includes records with actual values and observations.
- 12. The HACCP plan is dated and signed by a responsible establishment official.

The results of these evaluations were as follows:

Est.#	1. Flow diagram	2. Haz- ard an- alysis conduct -ed	3. All hazards ident- ified	4. Use & users includ- ed	5. Plan for each hazard	6. CCPs for all hazards	7. Monitoring is specified	8. Corr. actions are des- cribed	9. Plan valida- ted	10.Ade- quate verific. Proced- ures	11.Ade- quate docu- menta- tion	12. Dated and signed
23	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	V	V	√	$\sqrt{}$	V	$\sqrt{}$	$\sqrt{}$	√	$\sqrt{}$
52	√	V	√	√	√	√	√	√	√	√	√	$\sqrt{}$
70	√	√	√	√	√	√	√	√	√	√	√	√
78	√	V	√	V	√	√	√	V	√	√	√	√
119	√	V	√	V	V	√	√	V	√	√	√	√
130	√	√	√	V	√	√	√	V	√	√	√	√
134	√	√	√	√	√	√	√	√	√	√	√	√
173	√	V	V	V	V	V	V	V	V	V	V	V

Internal compliance audit documentation records of establishments 18, 23, 39, 54, 84, 87, 100, 104, 118, 122, 128, 366 and 504 were audited and met all the requirements of FSIS.

Data Collection Instrument for Generic E. coli Testing

Each establishment (except Est. 237, which was a cold-storage facility) was evaluated to determine if the basic FSIS regulatory requirements for generic *E. coli* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written procedure for testing for generic E. coli.
- 2. The procedure designates the employee(s) responsible to collect the samples.
- 3. The procedure designates the establishment location for sample collecting.
- 4. The sample collection is done on the predominant species being slaughtered.
- 5. The sampling is done at the frequency specified in the procedure.
- 6. The equivalent carcass site and collection methodology (Swab) is being used for sampling.
- 7. The carcass selection is following the random method specified in the procedure or is being taken randomly.
- 8. The laboratory is analyzing the sample using an AOAC Official Method.
- 9. The results of the tests are not being recorded on a process control chart but on a table form showing the most recent test results.
- 10. The test results are being maintained for at least 12 months.

	1.Writ-	2. Samp-	3.Samp-	4. Pre-	5. Samp-	6. Pro-	7. Samp-	8. Using	9. Chart	10. Re-
F . "	ten pro-	ler des-	ling lo-	domin.	ling at	per site	ling is	AOAC	or graph	sults are
Est. #	cedure	ignated	cation	species	the req'd	or	random	method	of	kept at
			given	sampled	freq.	method			results	least 1 yr
23					no				no	
52			\checkmark			\checkmark				\checkmark
70									no	
78									no	
119										
130		V	\checkmark			V	V		no	V
134			$\sqrt{}$				no		no	
173	V	V	V	V	V	V	V	V		V

Documentation was also audited from the following establishments that were not visited on-site, during the centralized document audit: 18, 23, 39, 54, 84, 87, 100, 104, 118, 122, 128, 366, and 504.

Data Collection Instrument for Salmonella testing

Each slaughter establishment was evaluated to determine if the basic FSIS regulatory requirements for *Salmonella* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. Salmonella testing is being done in this establishment.
- 2. Carcasses are being sampled.
- 3. Ground product is being sampled.
- 4. The samples are being taken randomly.
- 5. The equivalent carcass site and method is being used for sampling.
- 6. Establishments in violation are not being allowed to continue operations.

The results of these evaluations were as follows:

	1. Testing	2. Carcasses	3. Ground	4. Samples	5. Proper site	6. Violative
Est. #	as required	are sampled	product is	are taken	and/or	est's stop
			sampled	randomly	proper prod.	operations
23	$\sqrt{}$	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
52	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
70	V		N/A	V		$\sqrt{}$
78	V		N/A	V		$\sqrt{}$
119	V		N/A	V		$\sqrt{}$
130	V	V	N/A	V	V	V

Documentation was also audited from the following establishments that were not visited on-site, during the centralized document audit: 18, 23, 39, 54, 84, 87, 100, 104, 118, 122, 128, 366 and 504. All audited records met the USDA requirements in all establishments.